

Permit Renewal & Amendment Source Analysis & Technical Review

Company:	GAF Materials Corporation	Permit No.:	7711A
City:	Dallas	Project No.:	75805 and 83987
County:	Dallas	Account No.:	DB-0378-S
Project Type:	RNEW and RAMD	Regulated Entity No.:	RN100788959
Project Reviewer:	Mr. Joshua Reddoch	Customer Reference No.:	CN600474753
Facility Name:	Asphalt & Roofing Materials Manufacturing Facili		

Authorization Checklist

Will a new policy/precedent be established? (ED signature required if yes)	No
Is a state or local official opposed to the permit?(ED signature required if yes)	No
Is waste or tire derived fuel involved? (ED signature required if yes)	No
Are waste management facilities involved?(ED signature required if yes)	No
Will action on this application be posted on the Executive Director's agenda?	Yes
Have any changes to the application or subsequent proposals been required to increase protection of public health and the environment during the review?	No

Project Overview

The company submitted a PI-1R and supporting documentation for the renewal of Permit No. 7711A, which is a permit for their Line 3 roof shingle manufacturing. A VERP application (permit #48785) was received on April 23, 2001, for Line 1 of the facility. A visit to the plant revealed emissions from the cooling portion of Line 3 that were not represented in the existing permit. The plant visit also revealed that Lines 1 and 3 are not separate in asphalt receiving and processing, and are both controlled by the same electrostatic precipitator; therefore, the two lines could not be permitted separately. An application for an amendment was received on September 27, 2001, which required an additional public notice on July 4, 2002. The company elected to withdraw the VERP application and include Line 1 as part of the amendment to Permit 7711A.

Compliance History

In compliance with 30 TAC Chapter 60, a compliance history report was prepared on:	01/02/2004
The compliance period was from 09/28/2000 to 09/28/1995	
Was an evaluation for Federal Orders conducted on this company?	Yes
Was the application received after September 1, 2002?	No
If no, provide a description of findings of compliance history: No NOVs issued during the compliance history time period. However, a NOV was issued on July 10, 2002 because respondent failed to submit an emissions inventory for calendar year 2001 on or before 3/31/2002. The NOV has been resolved.	
Is the permit recommended to be denied or has the permit changed on the basis of compliance history or rating?	No

Public Notice Information RENEWAL

§ 39.403	Public notification required?	Yes
	A. Date application received: 09/28/2000 Date Administrative Complete:	10/17/2000
	B. Small Business source?	No
§ 39.418	C. Date 1st Public Notice /Admin Complete/Legislators letters mailed:	10/28/2000
§ 39.603	D. Pollutants: PM, NO _x , SO ₂ , CO, and VOC	
	E. Date Published: 11/09/2000 in <i>The Dallas Morning News</i>	
	Date Affidavits/Copies received: 11/20/2000	
	F. Bilingual notice required?	Yes
	Language: Spanish	
	Date Published: 11/09/2000 in <i>El Extra</i>	
	Date Affidavits/Copies received: 11/20/2000	
§ 39.604	G. Certification of Sign Posting / Application availability	12/01/2000
	H. Public Comments Received? Yes	
	Meeting requested? No Hearing requested? Yes Hearing held? No	
	Was/were the request(s) withdrawn? Yes Date: 10/11/2002	
	Replies to Comments sent to OCC:	06/30/2004
	Consideration of Comments: No changes were made to the draft permit.	

Renewal/Amendment Technical Review

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Public Notification - AMENDMENT

§ 39.403	Public notification required?	Yes
	A. Date application received: 09/27/2001 Date Administrative Complete:	06/07/2002
	B. Small Business source?	No
§ 39.418	C. Date 1st Public Notice /Admin Complete/Legislators letters mailed:	06/07/2002
§ 39.603	D. Pollutants: PM, NO _x , SO ₂ , CO, and VOC	
	E. Date Published: 07/04/2002 in <i>The Dallas Morning News</i>	
	Date Affidavits/Copies received: 07/22/2002	
	F. Bilingual notice required?	Yes
	Language: Spanish	
	Date Published: 07/04/2002 in <i>El Extra</i>	
	Date Affidavits/Copies received: 07/22/2002	
§ 39.604	G. Certification of Sign Posting / Application availability	08/10/2002
	H. Public Comments Received? No	
	Meeting requested? No Hearing requested? No	
§ 39.419	2nd Public Notification required?	No
	If no, give reason: No comments received	

30 TAC Chapter 116 Rules - Renewal Requirements

§ 116.315(b)	Date of expiration of permit?	12/04/2000
§ 116.310	Date written notice of review was mailed	Unknown
§ 116.310	Date application for Renewal (PI-1R) received?	09/28/2000
§116.311(a)(1)	Do dockside vessel emissions associated with the facility comply with all regulations?	NA
§ 116.311(a)(2)	Is the facility being operated in accordance with all requirements and representations specified in the current permit and do the emissions from the facility comply with all TCEQ air quality rules and regulations, and with the intent of the Texas Clean Air Act ?	Yes
§ 116.311(a)(3)	Compliance with applicable NSPS?	Yes
	Subparts A & UU	
§ 116.311(a)(4)	Compliance with applicable NESHAPS?	NA
§ 116.311(a)(5)	Compliance with applicable NESHAPS(MACT) for source categories?	NA
§ 116.311(a)(6)	Compliance with applicable hazardous air pollutant requirements in §116.180 - 116.183?	NA
	112(g) Review?	NA
§ 116.311(b)(1)	Is additional information regarding emissions from the facility and their impacts on the surrounding area required?	No
§ 116.311(b)(2)	Were additional controls/permit conditions necessary to avoid a condition of air pollution or to ensure compliance with applicable federal or state rules?	No
§ 116.314(a)	The facility meets all permit renewal requirements?	Yes
§ 116.313	Permit Renewal Fee: \$ 2,028 Paid?	Yes

30 TAC Chapter 116 Rules - Amendment Requirements

Emission Controls

§ 116.111(2)(C)	Will the facility utilize BACT?	Yes
§ 116.111(2)(G)	Is the facility expected to perform as represented in the application?	Yes
§ 116.140	Permit Fee: \$450 Fee certification provided?	Yes

Sampling And Testing

§ 116.111(2)(A)(i)	Are the emissions expected to comply with all TCEQ air quality Rules & Regs, and the intent of the Texas Clean Air Act?	Yes
§ 116.111(2)(B)	Will emissions be measured?	Yes
	Method: Opacity and Visibility - initial compliance stack testing	

Federal Program Applicability

§ 116.111(2)(D)	Compliance with applicable NSPS expected?	Yes
	Subparts A & UU	

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§ 116.111(2)(E) Compliance with applicable NESHAPS expected?	NA
§ 116.111(2)(F) Compliance with applicable MACT expected?	NA
§ 116.111(2)(H) Is nonattainment review required?	No
A. Is the site located in a nonattainment area?	Yes
B. Is the site a federal major source for a nonattainment pollutant?	No
C. Is the project a federal major source for a nonattainment pollutant by itself?	No
D. Is the project a federal major modification for a nonattainment pollutant?	No
§ 116.111(2)(I) Is PSD applicable?	No
A. Is the site a federal major source (100/250 tons/yr)?	No
B. Is the project a federal major source by itself?	No
C. Is the project a federal major modification?	No
1. Did project emission increases, without decreases, for pollutant of concern, minus the two-year average <u>actual</u> emissions trigger netting?	No
2. Was contemporaneous increase significant?	No
3. Change excluded by 40 CFR 52.21(b)(2)(iii)?	No

Mass Cap and Trade Applicability

§ 116.111(a)(2)(L) Is Mass Cap and Trade applicable?	No
Did the proposed facility, group of facilities, or account obtain allowances to operate?	NA

Title V Applicability

§ 122.10(13)(A) Is facility a major source under FCAA Section 112(b)?	No
(i). Facility emits 10 tons or more of any single HAP?	No
(ii). Facility emits 25 tons or more of a combination	No
§ 122.10(13)(C) Does the facility emit 100 tons or more of any air	Yes (PM) - a Title V application has been received
§ 122.10(13)(D) Is the facility a non-attainment major source?	No
Note: Fugitive emissions are not included in total emissions unless the facility is named in 30 TAC 122.10(8)(C).	

Request for Comments

Region: 4	Reviewed By: Paul Blanton, no objections
City: Dallas	Reviewed By: Barbara Trahan, no objections

Process Description

GAF is a nationwide manufacturer of building materials products. The GAF Dallas Facility manufactures asphalt shingles for the roofing industry. Asphalt roofing shingles manufacture start with a dry non-woven fiberglass mat being fed (unrolled) into the roofing shingle production line. A production line is divided into the following sections:

Section 1: A mechanical splicer and an accumulator are provided so a new roll can be spliced onto the end of the depleted roll without interruption of production.

Section 2: The fiberglass mat strand (approximately 60 inches wide) is pulled through a dip hot asphalt (powdered limestone stabilized) coater which coats both sides of the mat.

Section 3: Immediately after the coater ceramic granules are sprinkled onto the mat surface. As the mat goes through a reverse roller the granules are embedded into the asphalt coat and sand is sprinkled on the backside of the mat. This sand covers the asphalt and prevents sticking during the rest of the process and in the packaged shingles.

Section 4: The hot coated strand proceeds through cooling rolls (water cooled drums) where water is also sprayed onto the hot strand. The steam and mist vent upwards through three exhaust fans in the roof. It is then accumulated in festoons in the looper section to provide surge capacity required prior to cutting.

Section 5: Self-seal striping is applied in stripes and the strand is cut into shingle size and automatically packaged.

There are six major production support operations: (1) asphalt railcar unloading and storage, (2) asphalt blowing, (3) back surfacing (sand) and granule unloading and storage, (4) stabilizer unloading and storage, (5) stabilizer heating, and (6) stabilizer/asphalt mixing.

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Pollution Prevention, Sources, Controls and BACT [§116.111(a)(2)(C)]

Sources of emissions from this facility include the five sections listed above. The six major production support operations also provide sources of emissions. Section 1 emissions are vented to a dust collector (EPN 25). Section 2 emissions are vented to an electrostatic precipitator (EPN 34), with a control efficiency of 95%. Section 3 emissions are vented through an assortment of hooded pick-ups to a dust collector (EPN 25). Air emissions from asphalt storage and asphalt blowing are routed to a thermal oxidizer with a 96% destruction efficiency. Emissions from sand and granule unloading and storage are routed to a dust collector (EPN 25). Air emissions from the stabilizer storage silos are vented to two dust collectors (EPNs 26A and 26B). Air emissions from the stabilizer heating are routed to a dust collector (EPN 27). Air emissions from the mixer are routed to a dust collector (EPN 25). All dust collectors have an outlet grain loading of at least 0.01 gr/dscf. In my opinion, this facility meets BACT for these type of facilities.

Impacts Evaluation

1. Was modeling done? Yes Type? ISCST3 (version 02035)
2. Will GLC of any air contaminant cause violation of NAAQS? No
3. Is this a sensitive location with respect to nuisance? Moderate
4. Is the site within 3000 feet of any school? Yes
5. Toxics Evaluation: Air dispersion modeling predicted the following concentrations at the property line (standards in parentheses):

PM	one-hour	220.78 $\mu\text{g}/\text{m}^3$	(400 $\mu\text{g}/\text{m}^3$)
	three-hour	153.14 $\mu\text{g}/\text{m}^3$	(200 $\mu\text{g}/\text{m}^3$)
PM ₁₀	24-hour	139.38 $\mu\text{g}/\text{m}^3$	(150 $\mu\text{g}/\text{m}^3$)
	annual	49.46 $\mu\text{g}/\text{m}^3$	(50 $\mu\text{g}/\text{m}^3$)
SO ₂	three-hour	12.34 $\mu\text{g}/\text{m}^3$	(1,300 $\mu\text{g}/\text{m}^3$)
	24-hour	4.95 $\mu\text{g}/\text{m}^3$	(365 $\mu\text{g}/\text{m}^3$)
	annual	0.62 $\mu\text{g}/\text{m}^3$	(80 $\mu\text{g}/\text{m}^3$)
NO ₂	annual	59.9 $\mu\text{g}/\text{m}^3$	(100 $\mu\text{g}/\text{m}^3$)
CO	one-hour	77.32 $\mu\text{g}/\text{m}^3$	(2,000 $\mu\text{g}/\text{m}^3$)
	eight-hour	34.52 $\mu\text{g}/\text{m}^3$	(500 $\mu\text{g}/\text{m}^3$)

Miscellaneous

- Is applicant in agreement with special conditions? Yes
Company representative(s)? Fred Bright
Contacted via? email
Date of contact? 12/04/2003
Other permit(s) affected by this action? Permit application #48785 will be withdrawn. Line 1 will be included in this permit.

Project Reviewer

Date

Team Leader/Section Manager/Backup

Date